of that trivial *name*, and Harris' *species* became the *Musca macrocephala*, (L.) of Harris, which when found *not* to be the same as *Conops macrocephala*, L., remained without a valid name until Meigen in 1822 described what is now presumed to be the same species as *Rhingia campestris*, n. sp.

When it was discovered and published that *Musca macrocephala*, (L.) of Harris was not the *Conops macrocephala*, L., which Harris apparently believed it to be, Harris' species was identified first as *Rhingia campestris*, Mg., and later as *Rhingia rostrata*, (L.) (described by Linnaeus as a species of *Conops*), and this brings us to the question whether the reference to *Conops macrocephala*, L., by Harris was not a mistake for *Conops rostrata*, L. Both names appear in the 12th Edition of Linnaeus' Systema Naturae, to which Edition, according to a statement in the Introduction to Harris' "Exposition," all his references to Linnaean species were made, *and Harris on page 71 correctly recognized Conops macrocephala, L., as a species of Conops* (an identification easily made from Linnaeus' description) therefore *when only eleven pages later* Harris *again* refers a species to *Conops macrocephala*, L., this time a Syrphid of the distinct genus *Rhingia*, and we know that he had knowledge of Linnaeus' description of *Conops rostrata*, L., easily identifiable as that of a species of *Rhingia*, we are justified in assuming that this second reference to a *Conops macrocephala*, L., was a mistake for *Conops rostrata*, L. There are sufficient examples of carelessness in Harris' work to make it reasonable to believe that this second reference was a major mistake, and its acceptance as such undoubtedly clarifies everything that was otherwise obscure, though it in no way affects the question of the invalidity of the use of the name *macrocephala* for our common species of *Rhingia*.

OBSERVATIONS ON THE SPEED AT WHICH ANTS OF THE GENUS MESSOR TRAVELLED (HYM. FORMICIDAE) IN ALGERIA.

By W. Pickles, F.R.E.S.

Observations were made on nests of the ant *Messor barbarus*, L., *barbarus* during the year 1943 on a waste piece of ground on a hillside at Souk Ahras in Eastern Algeria. As is well known, these ants make long processions from their nests to the areas where they are collecting grass seeds and other seeds which they carry back to the nest.

Whilst making observations on these ants travelling to and from their nests along the well-defined trackways they appeared to travel at a more or less regular rate both going out and returning to the nest. When these ants emerge from their nests to go foraging, they resemble a stream of water flowing from a spring down the hillside; the whole column appears to glide along. On several occasions this "flood" of ants issuing from the nest was timed over a given distance and the average speed at which it was travelling calculated. For example, on 1st August 1943 such a stream of ants was emerging from a nest and this was observed to pass a given point at 6.6 p.m. (Double British Summer Time) and 9 minutes later at 6.15 p.m. they had travelled a distance of 45 feet. This works out at an average speed of 1 inch per

second. All these ants were carrying nothing. Another such record was established on 12th August 1943 when ants from another nest were observed just setting out on their foraging expedition at 6.22 p.m. and travelled 9 ft. in 3 min. 20 sec. (by 6 hrs. 25 min. 20 sec.). The average speed at which these ants were travelling was 0.54 inches per second. On 18th June two experiments were carried out to ascertain at what speed this species of ant was capable of travelling when carrying a load. Two ants covered a distance of 35 ft. in 23 mins. at an average speed of 0.3 ins. per second.

From many observations it became apparent that there were several factors which would govern the speed of the ants: (1) the distance travelled, i.e. fatigue; (2) whether loaded or not; (3) direction and velocity of the wind (this has a marked effect on ants when carrying large inflorescences capable of offering considerable resistance to the wind). The effect of wind on ants carrying loads might be very serious; cases were noted when an ant was completely lifted from the ground by the wind and deposited 6 inches or more away still holding on to its load. To try to eliminate as many factors as possible which would affect the speed of the ants, it was decided to make observations during the month of August (in actual fact they were made from 24th July until 1st September; circumstances beyond my control necessitated this change or modification). As far as possible the same hours of the day were utilised for the observations, i.e. roughly from 6.30 p.m. to about 8 p.m. (Double British Summer Time). The load that each ant was carrying, whether the worker was a micrergate or macrergate (small or large worker), etc., the direction of the wind (head, back, side, etc.) and the size of the inflorescence, i.e. whether consisting of one or more seeds was noted. Two hundred separate observations were made over a given distance of 10 feet, which was the last 10 feet which the ants had to travel on their way back to the nest from their foraging activity. Details of these observations are given in the accompanying table.

TABLE I. THE SPEEDS AT WHICH THE ANT *M. B. BARBARUS* TRAVELS WITH ITS LOADS.

Date.	Commencing time. Hr.	Min.	Sec.	Finishing time. Hr.	Min.	Sec.	Dist. in feet.	Time taken. Min.	Sec.	Speed in in./sec.	Wind.	Remarks: Type of ant. load. etc.	
24.vii.43.	8	0	20	8	2	30	10	2	10	0.92	Side.	Large.	1 seed.
	8	3	0	8	4	55	,,	1	55	1.04	,,	,,	1 ,,
	8	6	30	8	8	45	,,	2	15	0.89	,,	,,	2 ,,
	8	10	50	8	12	35	,,	1	45	1.14	,,	,,	1 ,,
	8	14	22	8	16	10	,,	1	48	1.11	,,	,,	2 ,,
	8	18	35	8	21	45	,,	3	10	0.63	,,	,,	2 ,,
	8	24	30	8	29	42	,,	5	12	0.38	,,	,,	3 ,,
	8	31	30	8	35	5	,,	3	35	0.56	,,	,,	0 ,,
26.vii.43.	6	57	30	7	0	45	,,	3	15	0.62	,,	Small.	2 ,,
	7	1	30	7	4	0	,,	2	30	0.80	,,	,,	1 ,,
	7	5	0	7	7	25	,,	2	25	0.83	,,	Large.	1 ,,
	7	8	0	7	9	32	,,	1	32	1.30	,,	,,	1 ,,
	7	11	0	7	13	48	,,	2	48	0.71	,,	Small.	1 ,,
	7	15	0	7	20	25	,,	5	25	0.37	,,	,,	1 ,,
	7	22	0	7	24	44	,,	2	44	0.73	,,	,,	1 ,,
	7	26	0	7	28	12	,,	2	12	0.99	,,	Large.	1 ,,
	7	29	0	7	31	20	,,	2	20	0.85	,,	,,	2 ,,
	7	32	0	7	34	38	,,	2	38	0.76	,,	,,	0 ,,

Date.	Commencing time. Hr.	Min.	Sec.	Finishing time. Hr.	Min.	Sec.	Dist. in feet.	Time taken. Min.	Sec.	Speed in in./sec.	Wind.	Remarks: Type of ant, load, etc.
	7	36	10	7	38	53	,,	2	43	0.74	,,	Small. 0 ,,
	7	41	30	7	44	21	,,	2	51	0.70	,,	Large. 1 ,,
	7	46	0	7	48	46	,,	2	46	0.72	,,	Small. 0 ,,
	7	49	30	7	53	0	,,	3	30	0.57	,,	,, 2 ,,
	7	54	0	7	57	23	,,	3	23	0.59	,,	,, 2 ,,
28.vii.43.	7	13	30	7	15	46	,,	2	16	0.88	Back.	,, 1 ,,
	7	16	30	7	19	0	,,	2	30	0.80	,,	Large. 4 ,,
	7	20	0	7	23	2	,,	3	2	0.66	,,	,, 1 ,,
	7	24	0	7	26	47	,,	2	47	0.72	,,	,, 2 ,,
	7	29	0	7	33	17	,,	4	17	0.46	,,	Small. 1 ,,
	7	39	15	7	43	40	,,	4	25	0.45	,,	Large. 1 ,,
	7	44	15	7	48	22	,,	4	7	0.48	,,	,, 3 ,,
	7	51	30	7	56	50	,,	5	20	0.37	,,	Small. 1 ,,
	7	57	30	8	3	40	,,	6	10	0.32	,,	,, 1 ,,
	8	4	30	8	9	12	,,	4	42	0.43	,,	Large. 1 ,,
30.vii.43.	7	24	20	7	27	15	,,	2	55	0.69	,,	,, 1 ,,
	7	27	45	7	30	23	,,	2	38	0.76	,,	,, 1 ,,
	7	31	0	7	33	30	,,	2	30	0.80	,,	Small. 1 ,,
	7	34	0	7	36	34	,,	2	34	0.78	,,	Large. 2 ,,
	7	38	50	7	42	23	,,	3	33	0.56	,,	Small. 1 ,,
	7	44	20	7	47	30	,,	3	10	0.63	,,	,, 1 ,,
	7	48	0	7	51	33	,,	3	33	0.56	,,	Large. 3 ,,
	7	52	15	7	54	47	,,	2	32	0.79	,,	,, 1 ,,
	7	55	30	7	59	31	,,	4	1	0.50	,,	Small. 1 ,,
	8	0	50	8	3	22	,,	2	32	0.79	,,	,, 1 ,,
1.viii.43.	6	41	20	6	43	32	,,	2	12	0.91	,,	Large. 2 ,,
	6	45	0	6	47	0	,,	2	0	1.00	,,	,, 1 ,,
	6	48	10	6	50	17	,,	2	7	0.94	,,	Small. 2 ,,
	6	51	0	6	53	12	,,	2	12	0.91	,,	Large. 4 ,,
	6	53	45	6	55	17	,,	1	32	1.30	,,	Small. 1 ,,
	6	55	48	6	57	30	,,	1	42	1.17	,,	Large. 1 ,,
	6	58	0	6	59	15	5	1	15	0.80	,,	,, 1 ,,
	7	0	0	7	1	28	10	1	28	1.37	,,	,, 1 ,,
	7	2	15	7	4	32	,,	2	17	0.88	,,	,, 3 ,,
	7	6	45	7	8	18	,,	1	33	1.29	,,	Small. 1 ,,
10.viii.43.	7	1	0	7	3	14	,,	2	14	0.89	,,	Large. 2 ,,
	7	3	45	7	6	6	,,	2	21	0.85	,,	,, 3 ,,
	7	6	45	7	8	30	,,	1	45	1.14	,,	,, 1 ,,
	7	9	0	7	11	27	,,	2	27	0.82	,,	,, 1 ,,
	7	12	30	7	17	38	,,	5	8	0.39	,,	,, 1 ,,
	7	18	0	7	22	54	,,	4	54	0.41	,,	,, 10 ,,
	7	23	30	7	26	28	,,	2	58	0.67	,,	Small. 1 ,,
	7	27	0	7	30	37	,,	3	37	0.55	,,	,, 0 ,,
	7	31	15	7	35	12	,,	3	57	0.51	,,	Large. 2 ,,
	7	36	45	7	40	12	,,	3	27	0.58	,,	Small. 1 ,,
	7	40	45	7	43	54	,,	3	9	0.63	,,	Large. 0 ,,
	7	44	30	7	49	0	,,	4	30	0.44	,,	,, 1 ,,
	7	49	20	7	52	34	,,	3	14	0.62	,,	,, 1 ,,
	7	58	0	8	1	12	,,	3	12	0.63	,,	,, 0 ,,
	8	2	0	8	6	15	,,	4	15	0.47	,,	Small. 1 ,,
12.viii.43.	6	52	20	6	54	42	,,	2	22	0.84	,,	Large. 1 ,,
	6	55	50	6	58	27	,,	2	37	0.76	,,	,, 3 ,,
	6	59	0	7	0	58	,,	1	58	1.02	,,	Small. 1 ,,
	7	1	45	7	3	24	,,	1	39	1.21	,,	Large. 1 ,,
	7	4	3	7	6	8	,,	2	5	0.96	,,	,, 0 ,,
	7	7	0	7	9	15	,,	2	15	0.89	,,	,, 4 ,,
	7	10	50	7	12	12	,,	1	22	1.46	,,	,, 1 ,,
	7	12	50	7	14	30	,,	1	40	1.20	,,	,, 1 ,,
	7	15	0	7	16	57	,,	1	57	1.03	,,	Small. 1 ,,
	7	17	50	7	20	41	,,	2	51	0.70	,,	Large. 1 ,,
	7	21	20	7	25	32	,,	4	12	0.48	,,	,, 7 ,,

Date.	Commencing time. Hr.	Min.	Sec.	Finishing time. Hr.	Min.	Sec.	Dist. in feet.	Time taken. Min.	Sec.	Speed in in./sec.	Wind.	Remarks: Type of ant, load, etc.		
	7	26	46	7	29	45	,,	2	59	0.67	,,	Large.	0	,,
	7	30	20	7	36	20	,,	6	0	0.33	,,	,,	8	,,
	7	37	0	7	41	47	,,	4	47	0.42	,,	Small.	1	,,
	7	42	30	7	46	28	,,	3	58	0.50	,,	,,	0	,,
	7	47	0	7	51	20	,,	4	20	0.46	,,	Large.	0	,,
	7	54	0	7	58	33	,,	4	33	0.44	,,	,,	8	,,
	7	59	0	8	3	28	,,	4	28	0.45	,,	Small.	1	,,
	8	4	0	8	6	52	,,	2	52	0.70	,,	Large.	0	,,
	8	7	40	8	11	51	,,	4	11	0.48	,,	Small.	1	,,
14.viii.43.	6	39	30	6	41	45	,,	2	15	0.89	None.	,,	1	,,
	6	42	20	6	44	20	,,	2	0	1.00	,,	Large.	2	,,
	6	45	0	6	47	36	,,	2	36	0.77	,,	,,	2	,,
	6	49	20	6	51	30	,,	2	10	0.92	,,	,,	1	,,
	6	52	0	6	53	57	,,	1	57	1.03	,,	,,	1	,,
	6	54	30	6	56	48	,,	2	18	0.87	,,	,,	1	,,
	6	57	20	6	59	37	,,	2	17	0.88	,,	Small.	1	,,
	7	0	20	7	3	17	,,	2	57	0.68	,,	Large.	4	,,
	7	4	0	7	6	21	,,	2	21	0.85	,,	,,	2	,,
	7	7	30	7	9	50	,,	2	20	0.86	,,	Small.	1	,,
	7	10	30	7	13	38	,,	3	8	0.64	,,	,,	2	,,
	7	14	30	7	17	59	,,	3	29	0.57	,,	Large.	3	,,
	7	18	30	7	21	37	,,	3	7	0.64	,,	,,	1	,,
	7	22	30	7	24	48	,,	2	18	0.87	,,	,,	1	,,
	7	25	30	7	28	0	,,	2	30	0.80	,,	Small.	1	,,
	7	28	30	7	32	0	,,	3	30	0.57	,,	Large.	2	,,
	7	32	30	7	37	42	,,	5	12	0.38	,,	Small.	3	,,
	7	38	30	7	40	54	,,	2	24	0.83	,,	Large.	2	,,
	7	41	30	7	45	24	,,	3	54	0.51	,,	,,	1	,,
	7	46	0	7	48	0	,,	2	0	1.00	,,	,,	2	,,
	7	48	20	7	53	36	,,	5	16	0.38	,,	,,	1	,,
	7	54	0	7	57	7	,,	3	7	0.64	,,	,,	2	,,
	7	59	30	8	5	15	,,	5	45	0.35	,,	Small.	2	,,
	8	5	45	8	9	3	,,	3	18	0.60	,,	Large.	2	,,
	8	9	30	8	13	30	,,	4	0	0.50	,,	,,	2	,,
16.viii.43.	6	45	0	6	46	48	,,	1	48	1.11	Slight.	,,	2	,,
	6	47	30	6	49	30	,,	2	0	1.00	Back.	,,	1	,,
	6	50	20	6	52	12	,,	1	52	1.07	Wind.	,,	1	,,
	6	52	45	6	54	47	,,	2	2	0.98	,,	Small.	2	,,
	6	55	20	6	57	15	,,	1	55	1.04	,,	Large.	2	,,
	6	57	30	7	0	37	,,	3	7	0.64	,,	Small.	2	,,
	7	1	0	7	3	12	,,	2	12	0.91	,,	,,	1	,,
	7	5	45	7	8	13	,,	2	28	0.81	,,	Large.	2	,,
	7	8	45	7	11	45	,,	3	0	0.67	,,	Small.	2	,,
	7	12	15	7	15	52	,,	3	37	0.55	,,	Large.	3	,,
	7	16	45	7	19	16	,,	2	31	0.79	,,	Small.	2	,,
	7	19	45	7	23	55	,,	4	10	0.48	,,	,,	3	,,
	7	26	0	7	29	46	,,	3	46	0.53	,,	Large.	2	,,
	7	27	0	7	36	0	6½	9	0	0.14	,,	,,	14	,,
	7	30	15	7	34	45	10	4	30	0.44	,,	,,	2	,,
	7	35	10	7	38	12	,,	3	2	0.66	,,	,,	1	,,
	7	39	0	7	40	57	,,	1	57	1.03	,,	,,	1	,,
	7	42	30	7	45	41	,,	3	11	0.63	,,	,,	2	,,
	7	47	6	7	50	30	,,	3	24	0.59	,,	Small.	2	,,
	7	59	0	8	3	5	,,	4	5	0.49	,,	Large.	2	,,
	8	4	0	8	7	8	,,	3	8	0.64	,,	Small.	0	,,
	8	8	45	8	10	44	,,	1	59	1.01	,,	Large.	0	,,
	8	11	0	8	14	53	,,	3	53	0.51	,,	,,	1	,,
17.viii.43.	6	52	0	6	53	45	,,	1	45	1.14	Calm.	,,	1	,,
	6	54	25	6	56	0	,,	1	35	1.26	,,	,,	0	,,
	6	56	30	6	58	8	,,	1	38	1.22	,,	,,	1	,,
	6	59	0	7	0	52	,,	1	52	1.07	,,	,,	1	,,

Date.	Commencing time. Hr.	Min.	Sec.	Finishing time. Hr.	Min.	Sec.	Dist. in feet.	Time taken. Min.	Sec.	Speed in in./sec.	Wind.	Remarks: Type of ant, load, etc.
	7	1	20	7	2	55	,,	1	35	1.26	,,	Small. 2 ,,
	7	3	15	7	5	30	,,	2	15	0.89	,,	Large. 2 ,,
	7	7	30	7	11	0	,,	3	30	0.57	,,	,, 3 ,,
	7	11	30	7	14	24	,,	2	54	0.69	,,	,, 2 ,,
	7	15	0	7	17	0	,,	2	0	1.00	,,	Small. 1 ,,
	7	17	30	7	20	33	,,	3	3	0.66	,,	Large. 1 ,,
	7	20	50	7	23	12	,,	2	22	0.85	,,	,, 1 ,,
	7	23	45	7	26	50	,,	3	5	0.65	,,	,, 2 ,,
	7	27	10	7	29	55	,,	2	45	0.73	,,	,, 1 ,,
	7	30	0	7	32	42	,,	2	42	0.74	,,	,, 1 ,,
	7	33	0	7	35	40	,,	2	40	0.75	,,	Small. 1 ,,
	7	36	25	7	38	53	,,	2	28	0.81	,,	Large. 1 ,,
	7	39	0	7	42	25	,,	3	25	0.59	,,	Small. 2 ,,
	7	42	45	7	45	41	,,	2	56	0.68	,,	,, 1 ,,
	7	46	30	7	50	2	,,	3	32	0.57	,,	Large. 1 ,,
	7	51	0	7	54	23	,,	3	23	0.59	,,	Small. 1 ,,
	7	55	0	7	57	18	,,	2	18	0.87	,,	Large. 1 ,,
	7	57	45	8	1	12	,,	3	27	0.58	,,	Small. 2 ,,
	8	1	50	8	3	48	,,	1	58	1.02	,,	Large. 1 ,,
	8	4	10	8	6	12	,,	2	2	0.98	,,	,, 0 ,,
	8	6	30	8	9	8	,,	2	38	0.76	,,	,, 0 ,,
22.viii.43.	6	44	0	6	46	10	,,	2	10	0.92	Side.	,, 1 ,,
	6	47	6	6	50	12	,,	3	12	0.62	,,	,, 1 ,,
	6	50	20	6	53	25	,,	3	5	0.65	,,	,, 3 ,,
	6	54	0	6	56	10	,,	2	10	0.92	,,	,, 2 ,,
	6	56	45	7	0	55	,,	4	10	0.48	,,	,, 2 ,,
	7	1	0	7	5	10	,,	4	10	0.48	,,	,, 1 ,,
	7	5	30	7	8	0	,,	2	30	0.80	,,	,, 1 ,,
	7	8	15	7	11	52	,,	3	37	0.55	,,	,, 1 ,,
	7	12	10	7	14	53	,,	2	43	0.74	,,	,, 1 ,,
	7	23	30	7	26	50	,,	3	20	0.60	,,	,, 1 ,,
	7	27	20	7	31	10	,,	3	50	0.52	,,	Small. 1 ,,
	7	31	45	7	34	4	,,	2	19	0.86	,,	Large. 1 ,,
	7	34	45	7	38	5	,,	3	20	0.60	,,	,, 3 ,,
	7	39	0	7	43	30	,,	4	30	0.44	,,	Small. 2 ,,
	7	44	0	7	46	24	,,	2	24	0.83	,,	Large. 0 ,,
	7	46	45	7	49	10	,,	2	25	0.83	,,	,, 1 ,,
	7	51	0	7	54	12	,,	3	12	0.62	,,	,, 1 ,,
	7	55	10	7	57	0	,,	1	50	1.09	,,	,, 0 ,,
	7	57	10	7	59	11	,,	2	1	0.99	,,	,, 1 ,,
	8	0	0	8	2	7	,,	2	7	0.94	,,	,, 0 ,,
28.viii.43.	7	5	0	7	8	15	,,	3	15	0.62	Head.	,, 1 ,,
	7	8	45	7	11	30	,,	2	45	0.73	,,	,, 2 ,,
	7	12	0	7	15	52	,,	3	52	0.52	,,	,, 2 ,,
	7	16	0	7	20	48	,,	4	48	0.42	,,	,, 1 ,,
	7	21	0	7	25	23	,,	4	23	0.46	,,	Small. 1 ,,
	7	26	0	7	28	12	,,	2	12	0.91	,,	Large. 1 ,,
	7	30	0	7	33	6	,,	3	6	0.65	,,	Small. 1 ,,
	7	33	45	7	37	35	,,	3	50	0.52	,,	Large. 1 ,,
	7	38	0	7	42	0	,,	4	0	0.50	,,	,, 2 ,,
	7	42	16	7	46	35	,,	4	19	0.46	,,	,, 1 ,,
1.ix.43.	7	11	50	7	15	10	,,	3	20	0.60	Side.	Small. 1 ,,
	7	15	30	7	18	52	,,	3	22	0.59	,,	Large. 0 ,,
	7	19	30	7	22	12	,,	2	42	0.74	,,	Small. 1 ,,
	7	23	0	7	26	3	,,	3	3	0.66	,,	,, 1 ,,
	7	26	20	7	29	45	,,	3	25	0.59	,,	Large. 1 ,,
	7	30	0	7	34	0	,,	4	0	0.50	,,	Small. 1 ,,
	7	34	10	7	37	38	,,	3	28	0.58	,,	Large. 1 ,,
	7	38	0	7	41	25	,,	3	25	0.59	,,	,, 2 ,,

From this table there are several interesting results which emerge. First, each individual ant varies its speed according to the particular circumstances; a small ant may travel quicker than a larger one over a given distance because it is carrying nothing and the larger one may possibly be carrying a load, or there may be no such cause, the individual ant may be more " interested " in its immediate surroundings than its fellows and will therefore travel more slowly on that account.

The effect of the wind seems to be of less account than might be expected unless it is strong and the burden being carried by the ant is not compact and is in such a form as to be easily " caught " by the wind. Ants carrying a piece of grass stalk ½ in. long are affected by the wind more than those carrying a smaller piece in a horizontal position. The same applies to the number of grass seeds on a stalk, the more there are on a stalk, the more likely are the ants to carry it in an upright position or drag it, so that apart from weight there is also the increased wind resistance to overcome in these cases. Therefore the method used by the ants in carrying their load is of consequence in regulating their speeds.

From observations detailed in Table I it will be seen that the highest speed recorded was on 26th July 1943 by one large ant carrying one grass inflorescence with one seed attached; this speed was 1.30 inches per second. The slowest speed was recorded on 16th August 1943 when one large ant carrying a grass-head bearing 14 seeds took nine minutes to cover a distance of 6 ft. 6 in. at an average speed of 0.14 inches per second. Other slow speeds recorded by these ants carrying one seed were on 26th and 28th July 1943 when small ants proceeded at speeds of 0.37 and 0.32 inches per second. It is worthy of note and also to illustrate the individuality of these speeds that on the same day, namely 26th July 1943, the fastest and one of the slowest speeds were recorded, the former by a large ant and the latter by a small ant each carrying one seed.

Although it is unsafe to generalise and to take averages from these results, it would seem that, as the stream of ants passes along its trackway, some carrying loads and some empty, some small and some large ants, it may be stated that, at the times and under the conditions prevailing at the time, their average speed was in the region of 0.65 inches per second, which compares favourably with the observations on ants emerging from their nests quoted at the beginning of this paper. To state more than this is perhaps unsafe as the individual speeds are governed by so many factors.

I wish to thank Mr H. St J. K. Donisthorpe for naming the ants for me.

COLLECTING NOTES.

Spring Notes from East Tyrone, 1946.—The months of February, March and early April were exceptionally warm and mild, wind mostly south or west; *Colostygia multistrigaria* was out in numbers towards the end of February; *Aglais urticae* and *Nymphalis io* appeared after their winter sleep on 13th March, and *Alsophila aescularia* was common at light. On 1st April thirty *Selenia bilunaria* were attracted, all males; the local form is fine and distinctly marked. At light also later